

a plurality of reaction vessels,

a reaction vessel support disposed to hold the plurality of reaction vessels in a preferred orientation, said reaction vessel support comprising top and bottom vessel support plates with tapered injection through fittings, the top and bottom support plates forming a carousel and the tapered injection through fittings being formed in a ring around the periphery of said top carousel vessel support plate and tapered evacuation fittings formed in a matching ring around the periphery of said bottom vessel support carousel plate,

a plurality of injection ports, each injection port including a pressure seal, situated to provide access to one of said reaction vessels, the plurality of injection ports operable for the injection of liquids into said reaction vessels,

a plurality of evacuation ports, each evacuation port including a pressure seal, situated to provide access to one of said reaction vessels, the plurality of evacuation ports operable for the evacuation of fluids from said reaction vessels, and

injection and evacuation fittings formed to matingly engage said respective injection and evacuation ports and to thereby enable the delivery of fluids to the reaction vessels and the evacuation of fluids from said reaction vessels.--

--67. A universal fluid exchanger comprising:

a plurality of reaction vessels;

a reaction vessel support disposed to hold the plurality of reaction vessels in a preferred orientation, the reaction vessel support further comprising top and bottom carousel vessel support plates with tapered injection through fittings formed in a ring around the periphery of said top carousel vessel support plate and tapered evacuation fittings formed in a matching ring around the periphery of said bottom vessel support carousel plate;

a plurality of injection ports, each injection port including a pressure seal, situated to provide access to one of said reaction vessels, the plurality of injection ports operable for the injection of liquids into said reaction vessels;

a plurality of evacuation ports, each evacuation port including a pressure seal, situated to provide access to one of said reaction vessels, the plurality of evacuation ports operable for the evacuation of fluids from said reaction vessels;

injection and evacuation fittings formed to matingly engage said respective injection and evacuation ports and to thereby enable the delivery of fluids to the reaction vessels and the evacuation of fluids from said reaction vessels; and

an actuator for controlling selectively aligning the injection and evacuation ports of the plurality of reaction vessels and the injection and evacuation fittings, respectively.--

REMARKS

The present amendment replies to the Official Action mailed July 28, 1999. A petition for a one month extension of time to respond and the fee for this extension accompany this amendment. The Official Action rejected claims 1-9, 23-29 and 47 under 35 U.S.C. 103(a) over Gleave et al. U.S. Patent No. 5,660,727 (Gleave) in view of Panetz et al. U.S. Patent No. 5,585,068 (Panetz). Claims 17-22, 29 and 35-40 were rejected under 35 U.S.C. 103(a) over Gleave in view of Averette U.S. Patent No. 5,147,551 (Averette). Claims 48-65 were rejected under 35 U.S.C. 103(a) over Gleave in view of Panetz further in view of Park et al. U.S. Patent No. 3,7154,190 (Park). After a brief discussion with Examiner Le to seek clarification, it appears that claims 10-16, 30-34 and 41-43 would be allowable if rewritten to include all of the limitations of their base claims and any intervening claims. Each of the items raised by the Official Action is addressed in order below following a brief discussion of the present invention